

Work Order ID 96316

February-07-13 9:08:25 AM

96316

ASAP

Page 1

Item ID: D412-783-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Gross Weight Towing

Start Date: 23/01/2013 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/01/2013 Req'd Qty: 1.00

1

Customer: CU-DAR001

Reference: RMA RA111468

Approvals: Process Plan: *ME*

Date: *13-2-07*

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3943	E
IIN-D412-783	C

100

0.00

100

QC

Quality Control

Memo

0.00

INSPECT RA111468 D412-783-011 X 1 B#84629

DAS 16 13/01/17

KIT NEEDS TO BE DISSASSEMBLED, REPOWDERCOATED AND RE-CALIBRATED

MCS 13-02-14

110

0.00

110

Large Fab

Large Fab

Memo

0.00

DISSASSEMBLE AND BRING TO FINISHING FOR STRIPPING AND REPOWDER COATING

KEEP ALL PARTS TOGETHER

13-2-11

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Page 2

Item ID: D412-783-011

Accept

N900040100

Setup Start ***NS1***

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Item Name: Gross Weight Towing

Stop ***NS2***

Start Date: 23/01/2013 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/01/2013 Req'd Qty: 1.00

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Customer: CU-DAR001

Reference: RMA RA111468

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

120

HandFinish

Hand Finishing

Memo

STRIP PARTS NEEDED

0.00

0.00

1 NG 13-2-12

130

130

Powdercoat

Powder Coating

Hybrid safety Yellow 4 3 5 12

Memo

1- MASK THREADS PRIOR TO PAINTING AS PER DWG

0.00

0.00

1 φ 13-2-13

2- POWDER COAT:

Start Time: 7:10

Oven Temperature: 320°

Finish Time: 7:40

140

140

QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00



13/2/13



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Item ID: D412-783-011

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Gross Weight Towing

Stop ***NS2***

Start Date: 23/01/2013 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/01/2013 Req'd Qty: 1.00

1

Customer: CU-DAR001

Reference: RMA RA111468

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
145		0.00							
145									
Large Fab	Memo	0.00							
Large Fab	RE-ASSEMBLE								
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.00							
Quality Control	1-Calibrate and tag as per dwg and QSI 008 4.4 ***Calibration Cert. filled out***								
155	Identify as per dwg & Stock Location	0.00							
155									
Packaging	Memo	0.00							
Packaging	ID AND STOCK UNDER NEW BATCH NUMBER								

DAS
16
9-83 13/2/13

CALIBRATION
ID: 05943-041396316
BY: 5 DATE: 13/2/13
DUE: 1 Year From 1st operation

13/2/14

Work Order ID 96316

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Item ID: D412-783-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Gross Weight Towing

Stop ***NS2***

Start Date: 23/01/2013 Start Qty: 1.00

1

Cust Item ID:

Required Date: 24/01/2013 Req'd Qty: 1.00

1

Customer: CU-DAR001

Reference: RMA RA111468

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

QC4- 100% Inspect kits for completeness

0.00

160

QC

Memo

0.00

Quality Control

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Memo

0.00

Quality Control

DAS
16
2-83

13/2/14

MCS 13-02-15

MF
13-2-15

Picklist Print

February-07-13 9:08:24 AM

Page 1

Work Order ID: 96316

Parent Item: D412-783-011

Start Date: 23/01/2013

Required Date: 24/01/2013

Parent Item Name: Gross Weight Towing

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 09-06-02 JLM Verified By:EC IPP Rev:B @ chg 002 DD
10.02.22 Verified By:EC IPP Rev:C @ chg 004 DD 11.08.15 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D412-783-011 Gross Weight Towing		Manufactured	No				Each	0.0000		1			

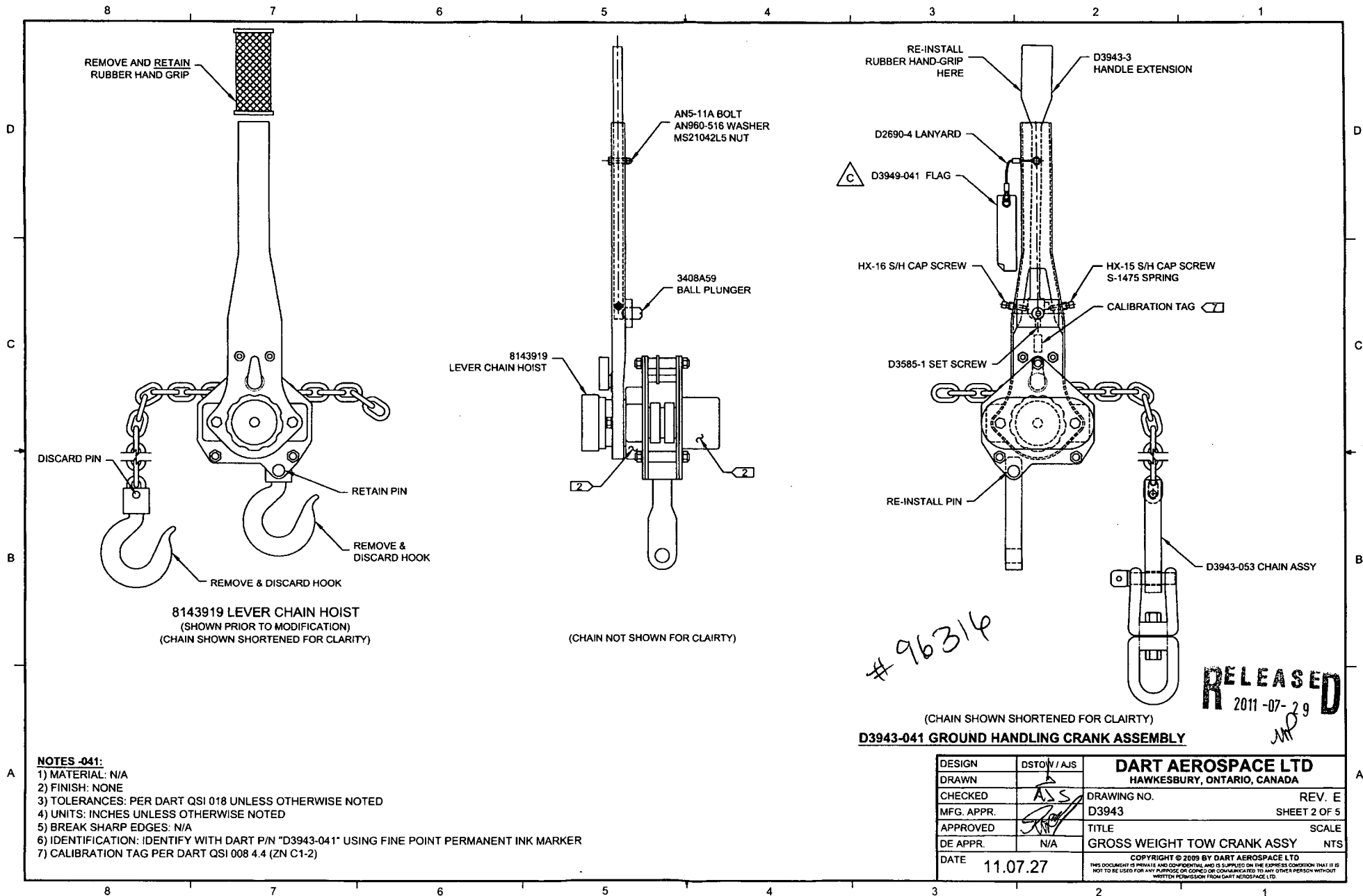
1 x 84629
MF
13-2-15

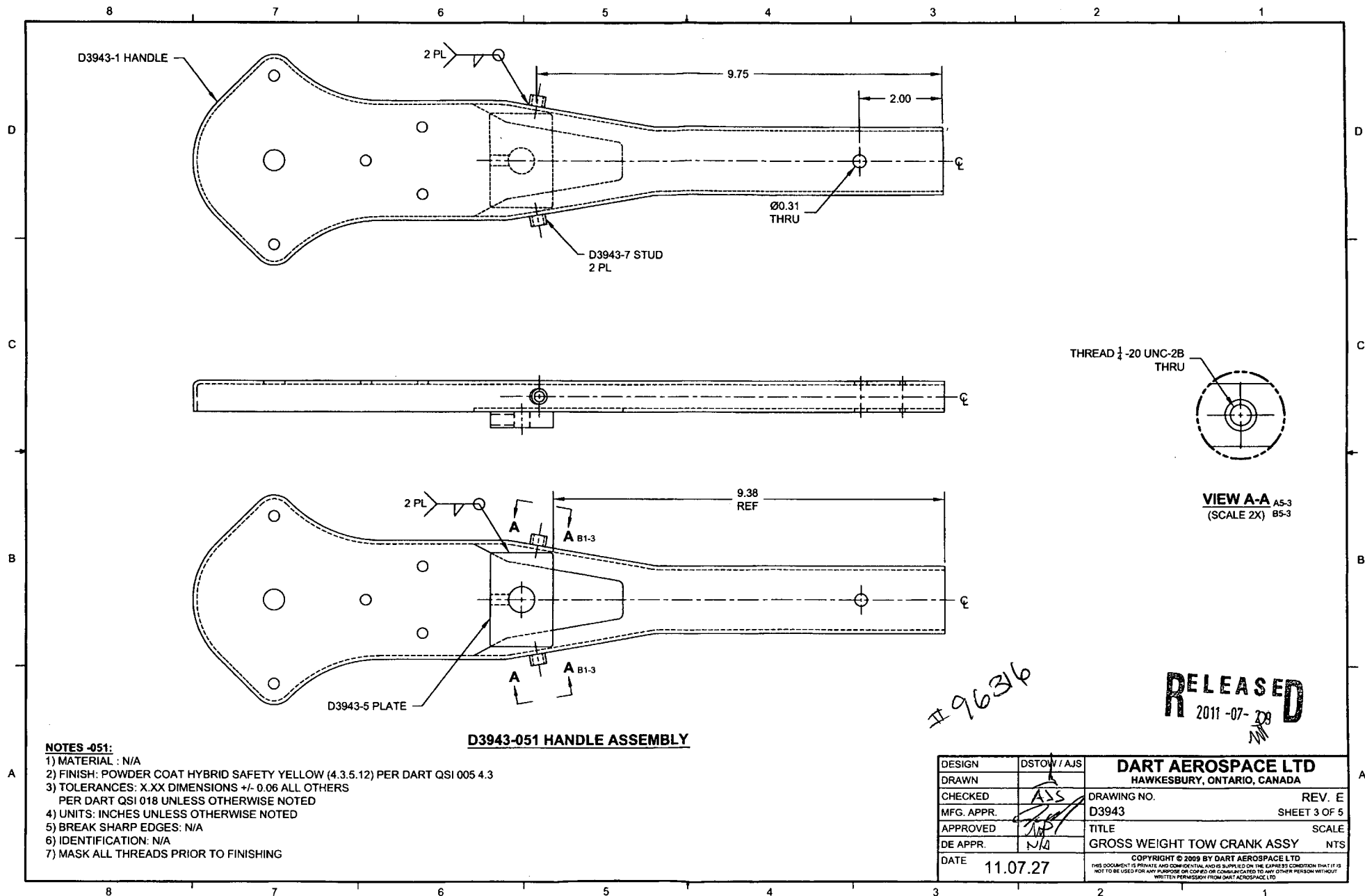
ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
16			1	D4405-1	EYE AND FORK SWIVEL	
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
51	1			S-1475	SPRING	REID SUPPLY
52	1			3408A59	BALL PLUNGER	McMASTER CARR
53	1			HX-15	SOCKET HEAD CAP SCREW 1/2-20 UNC X 0.75 LG	HASKINS
54	1			HX-16	SOCKET HEAD CAP SCREW 1/2-20 UNC X 1.0 LG	HASKINS

#96316

RELEASED
2011-07-29

E	CHANGED D3945-3 MAT'L TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PART11-113.	MB	11.07.27
D	SHT 1 PL, ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED. SHT 3 ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (ZN A8-2). ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5). ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1). PAR 10-001	CP	10.01.26
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTON / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. E
CHECKED	<i>ASS</i>	D3943	SHEET 1 OF 5
MFG. APPR.	<i>W</i>	TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	11.07.27		

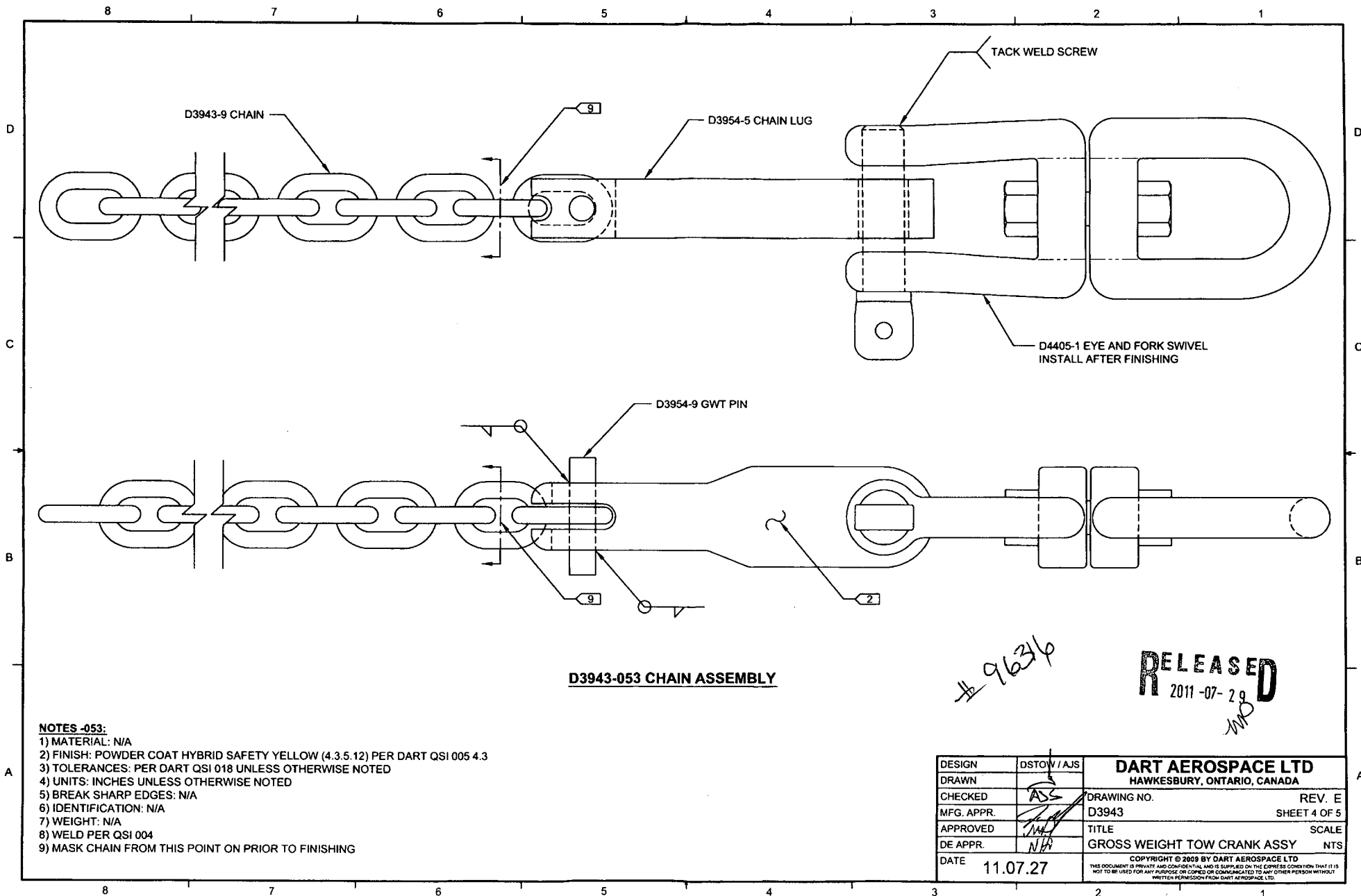




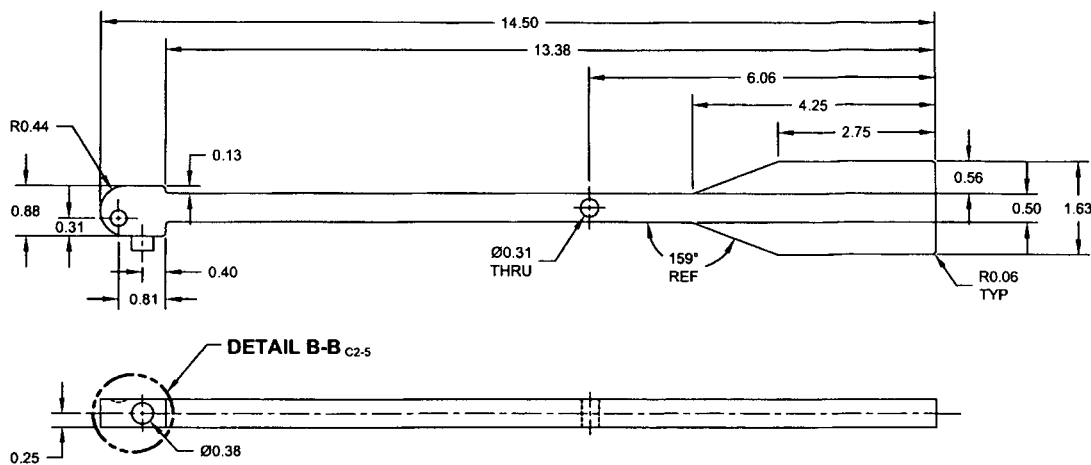
#96316

RELEASED
2011-07-28

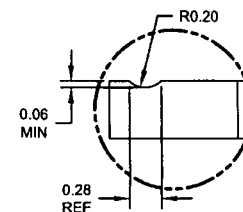
DESIGN	DSTOW/AJS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. E
MFG. APPR.		D3943	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.	N/A	GROSS WEIGHT TOW CRANK ASSY	NTS
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8 7 6 5 4 3 2 1



D3943-3 HANDLE EXTENSION



DETAIL B-B C7-5
(DIMPLE DETAIL)
(SCALE 2X)

NOTES:

1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S
OR:

AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S

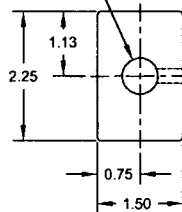
-5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S
OR:

MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B

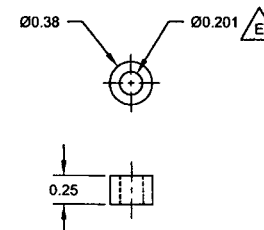
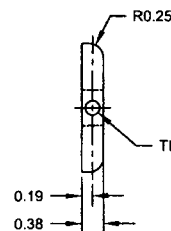
-7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R

- 2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A

THREAD $\frac{5}{8}$ -11 UNC-2B



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

RELEASED
2011-07-28

DESIGN	DSTOW / AJS	DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. E
MFG. APPR.		D3943 SHEET 5 OF 5
APPROVED		TITLE SCALE
DE APPR.		GROSS WEIGHT TOW CRANK ASSY NTS
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8 7 6 5 4 3 2 1

RA 111468

D412-783-011 B84629 D212-666-011 B87262

Received @ Dart January 11th, 2013
Inspected @ Dart January 17th, 2013

Customer: ROTOCRAFT SUPPORT INC
Customer Contact: VERONICA LAZANO
Shipped from: SAN DIEGO CA, USA

Instructions for RA 111468

- **D412-783-011 B84629 CHG004**
 - Due to improper packaging by customer crank assembly needs to be RE-FINISHED (re powder coated) see pics
 - Disassemble complete and strip all powder coated parts
 - Re powder coat as per QSI005
 - While doing this re swage handle to tight assembly and insure no complaints from future customers on stripping
 - Re assemble and re adjust the torque (new calibration sheet will be required)
 - Kit is complete
 - New work order needed
 - Needs new paper work and labels
- **D412-666-011 B87262 CHG 004**
 - Due to improper packaging by D2888 needs to be RE-FINISHED (re powder coated)
 - Strip D2888 and re alodine and re powder coat as per QSI005
 - Kit is complete
 - Needs new paper work and labels
 - Needs work order for all rework
 - Needs new BATCH #

50110221
12201105
75998
86654

Time Estimate = 10 HOURS

Departments Required: Stores, Large Fab, Finishing, & Dan Stow

Pictures Attached = YES

QTY INSPECTED = x1 D412-666-011 B87292
x1 D412-783-011 B84629

**THIS INSTRUCTION SHEET MUST BE
ATTACHED TO THE RESTOCKING
WORK ORDER AT ALL TIMES!!!!**

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

INTERNAL CALIBRATION CERTIFICATE

Instrument #	Description	Serial #
D3943-041	Ground Handling Crank Assembly	B96316

Calibrated by	Date of calibration	Calibrated with	Due	Certificate #
ED	February 13th, 2013			

New tool	Disposed	In Repair	On Hold	Being Calibrated

Employee	Department	Comments:
N/A	N/A	MUST BE CALIBRATED WITH IN 1 YEAR OF PURCHASE OR FIRST OPERATION

Spec.	Tolerance is + /-	Result	Pass Fail
3500LBS	3500-3700LBS	3600lbs	PASS

Entered By:
Eric Downing

DAS
16
9-89

Feb. 13th, 2013